**>>Download maps**Go to *navit map extractor* [http://maps5.navit-project.org](http://maps5.navit-project.org/)  
click "*navigate*"  
zoom in to the area you want e.g. USA  
click "*select*"  
select the area you want to download  
click "*GET MAP*"  
once this is downloaded go to the download directory on your computer  
locate the file which should be called something like "*osm\_bbox\_-5.7,49.9,1.8,55.6.bin*"  
change the map's name to something relevant such as "*map\_England.bin*"   
repeat the above until you have any/all of the maps that you want  
copy map file(s) to memory stick  
  
  
  
**>>Install GPSD for the GPS module:***sudo apt-get install gpsd gpsd-clients python-gps*  
  
**>>Start and test the GPS module***sudo killall gpsd {reports error first time}  
sudo gpsd /dev/ttyUSB0 -F /var/run/gpsd.sock  
cgps -s {ctrl-C to exit}*  
  
  
**>>Install NAVIT***sudo apt-get install gpsd gpsd-clients navit*  
  
  
**>> Test Navit runs and create the xml file/.navit***run navit from "others" folder and you should get a blank screen with a circle due to lack of a map  
exit navit*  
  
  
**>> Copy setup folder to your home directory***cp /etc/navit/navit.xml ~/.navit/navit.xml  
cd /home/pi/.navit  
ls*this should list at least the files "*navit.xml*" & "*centre.txt*"  
  
  
**>Install EMAPS (the text editor so that you can edit the config files)***sudo apt-get install emacs*  
  
  
  
**>Copy maps to .navit folder**Click second icon from left i.e. file manager  
Open *.navit* folder by changing address in address box from */home/pi to /home/pi/.navit*  
Open a second file manager window  
Copy map(s) from the memory stick to the *.navit* folder

**>>Edit the navit config file: {Note line numbers based on xml version 1.0}**  
Adjust the zoom from default of 256 to 8 [approx line 34]  
  
DEFAULT:  
*<navit center="4808 N 1134 E" zoom="256" tracking="1" orientation="-1" recent\_dest="10">*  
  
CHANGE TO:  
*<navit center="4808 N 1134 E" zoom="8" tracking="1" orientation="-1" recent\_dest="10">*  
  
---------------------------------------------------------------------------------------------------------------  
  
Remove the default map and replace with our map [approx line 612]  
  
DEFAULT:  
*<!-- If you dont want to use the sample map, either set enabled="no" in the next line or remove the xml file from the maps directory -->  
<mapset enabled="yes">  
<xi:include href="$NAVIT\_SHAREDIR/maps/\*.xml"/>  
</mapset>  
  
<!-- Mapset template for openstreetmaps -->  
<mapset enabled="no">  
<map type="binfile" enabled="yes" data="/etc/???????????.bin"/>  
</mapset>*  
  
CHANGE TO:  
*<!-- If you dont want to use the sample map, either set enabled="no" in the next line or remove the xml file from the maps directory -->  
<mapset enabled="no">  
<xi:include href="$NAVIT\_SHAREDIR/maps/\*.xml"/>  
</mapset>  
  
<!-- Mapset template for openstreetmaps -->  
<mapset enabled="yes">  
<map type="binfile" enabled="yes" data="/home/pi/.navit/map\_UK.bin"/>  
</mapset>*  
---------------------------------------------------------------------------------------------------------------  
  
Add compass  
  
approx line 101  
  
DEFAULT:  
*<osd enabled="no" type="compass"/>*  
CHANGE TO:  
*<osd enabled="yes" type="compass"/>*  
---------------------------------------------------------------------------------------------------------------  
  
Add zoom buttons  
  
approx line 113  
  
DEFAULT:  
*<osd enabled="no" type="button" x="-96" y="-96" command="zoom\_in()" src="zoom\_in.png"/>  
<osd enabled="no" type="button" x="0" y="-96" command="zoom\_out()" src="zoom\_out.png"/>*  
CHANGE TO:  
*<osd enabled="yes" type="button" x="-96" y="-96" command="zoom\_in()" src="zoom\_in.png"/>  
<osd enabled="yes" type="button" x="0" y="-96" command="zoom\_out()" src="zoom\_out.png"/>*